



WHITE PAPER

How Governors Scale High-Quality Youth Apprenticeship

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Executive Summary

The outlook for high school graduates who have no postsecondary or industry-recognized credentials can appear bleak. Today, it is critical that young people obtain at least some training beyond high school to succeed in the job market. States bear a cost, too, when this is not achieved: They have a less skilled workforce to attract business investment and must allocate limited federal and state resources to more social services for their unemployed and underemployed youth.

That's why governors are considering youth apprenticeship to connect more young people to career paths at an earlier age, while at the same time filling businesses' unmet workforce needs. Youth apprenticeship offers paid, hands-on work experience and related classroom instruction that result in postsecondary or industry-recognized credentials. Youth apprenticeship programs often remain underused, especially in high-growth, white-collar industries, but governors are exploring ways to guide development and expansion of these programs.

This white paper explores three strategies that governors can use to expand youth apprenticeship:

- **Act as a public champion** by setting a statewide vision and convening stakeholders to collaboratively implement that vision.
- **Allocate and use dedicated funding** to start and expand programs that support youth apprentices and guide them through their career pathways.
- **Implement policies** that provide long-term support for high-quality youth apprenticeship programs.

The governors of **Colorado, Kentucky, Maryland** and **North Carolina** have used these strategies to successfully develop and expand youth apprenticeship in their states. These states are highlighted in the case studies presented in this paper, which offer insights to inform other governors' efforts to expand youth apprenticeship and further connect high school education to workforce preparation and high-quality employment opportunities.

The National Governors Association Center for Best Practices (NGA Center) is a member of the Partnership to Advance Youth Apprenticeship (PAYA), created by New America. In 2018, PAYA launched a multiyear collaborative initiative that supports efforts in states and cities to expand access to high-quality apprenticeship opportunities for more high school youth. PAYA aims to improve public understanding and awareness of high-quality youth apprenticeship, inform learning across the country by sharing best practices about the conditions and strategies needed for successful and sustainable youth apprenticeship partnerships, and support the growth of high-quality youth apprenticeship. As part of its participation in this initiative, the NGA Center has produced this white paper based on insights and best practices identified in states during the first year of the initiative and on independent research.

Background

Today's high school graduates face significant challenges in finding employment, especially if they lack postsecondary or industry-recognized credentials. Today, at least two out of three jobs require some training beyond high school.¹ A recent Strada Education Network report shows that adults with some form of workforce postsecondary credential but without a college degree are almost 10% more likely to be employed than their peers who have no postsecondary credential.² Nearly one in 10 (9.3%) high school graduates aged 18 to 21 years not enrolled in further education is unemployed, and nearly one in five is underemployed.³

Youth unemployment and underemployment are costly for states in that they represent a loss of potential income tax revenue. In addition, states must allocate limited federal and state resources to increase social services to support this population.⁴ At the same time, the national unemployment rate is at an unprecedented low, and many businesses struggle to fill open positions.^{5,6} As a result, governors are looking for ways to connect more young people to successful career paths at an earlier age, fill unmet talent needs for growing businesses and break the cycle of poverty.

Work-based learning is an employer-driven workforce development strategy that states use to align education with the needs of business. It provides participants with opportunities to learn about different industries, occupations and jobs through a continuum of experiences, ranging from career awareness to career training.⁷ For example, career exploration and job shadowing are work-based learning activities that help participants learn more about certain industries and jobs. Career training is a more intensive process, with potentially greater results for employers and participants. High-quality work-based learning has core components that depend on a feedback loop across classroom instruction and authentic work experience to better prepare participants for the workplace (see Figure 1).⁸ Examples of high-quality work-based learning are found in some apprenticeships, pre-apprenticeships, internships and clinical experiences. They provide career awareness, exploration, preparation and hands-on training to participants while supplying employers with a pipeline of talent.⁹ Youth apprenticeship can be a form of high-quality work-based learning for high school students, offered at a critical time when youth explore career paths.

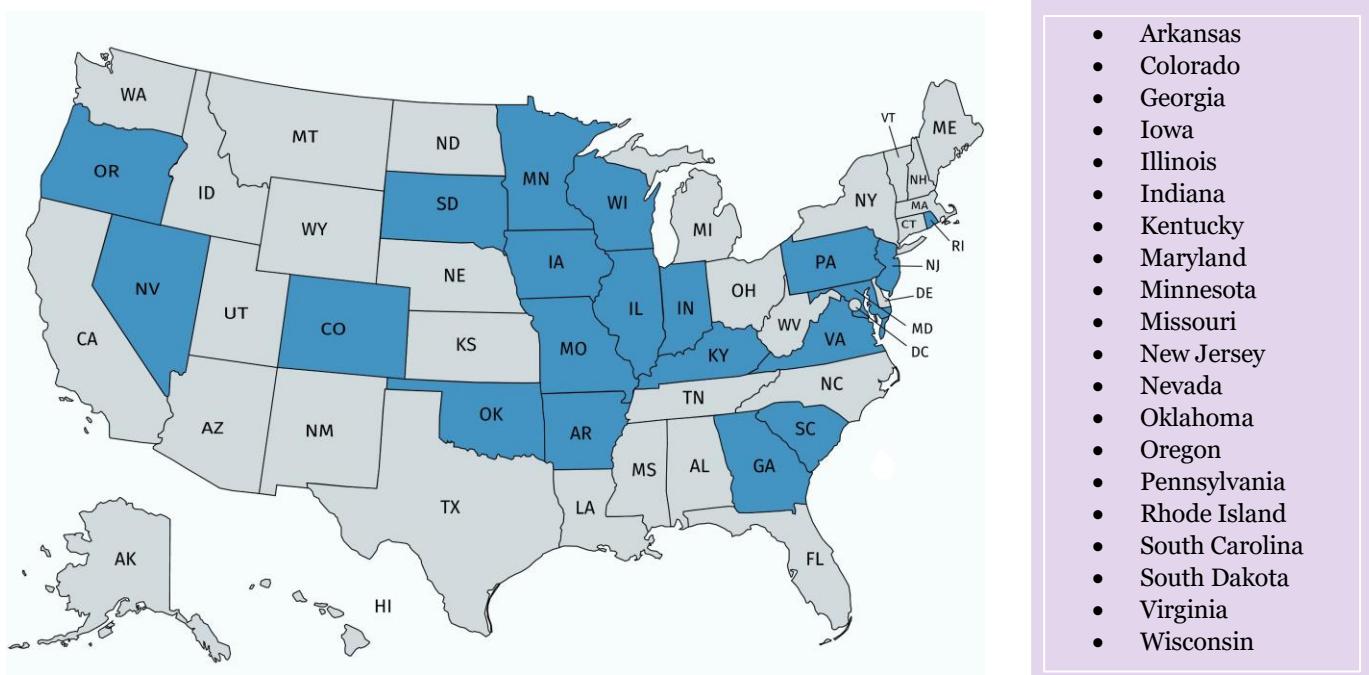
Figure 1: Core Components of High-Quality Work-Based Learning



Youth apprenticeship can be a powerful tool for reducing youth unemployment rates, but it often remains underused.¹⁰ Despite significant state advances in expanding youth apprenticeship, many U.S. high school students, parents and businesses are still unaware of the benefits of youth apprenticeship.¹¹ New America estimates that there are fewer than 20,000 youth apprentices nationwide, half of whom are located in two states: **Wisconsin** and North Carolina.¹² This situation has arisen partially because of a lack of awareness of the benefits youth apprenticeship programs have for employers and youths and partially because many employers are unable to strategically recruit and develop youth talent through apprenticeship programs.¹³

Another reason for this lack of awareness is that “youth apprenticeship” is not a term defined by the U.S. Department of Labor (DOL). However, DOL provides guidance for registered apprenticeship aimed at high school students that some states use in defining their youth apprenticeship programs (Figure 2). Registered apprenticeship is available for youths at least 16 years of age who are enrolled in secondary schools.¹⁴ In addition to the many regulations that govern industry involvement in apprenticeship programs, pay scales, competencies earned, and hours spent in the classroom and on the job, DOL recommends that apprenticeship for high school students align with secondary and postsecondary education and result in in-demand, industry-recognized credentials and certifications. The programs should incorporate postsecondary credentials that expand options for students and help them develop industry-specific competencies while enrolled in high school.¹⁵

Figure 2: States with a Statewide Definition of Youth Apprenticeship



Because “youth apprenticeship” is not defined at the federal level, state leaders can create a state-specific definition. Twenty states have such a definition (see Figure 2), with varying degrees of specificity and flexibility for local programs.¹⁶ Some states that define “youth apprenticeship” require programs that use this term to register with DOL or meet state-issued standards to operate.

To provide consistency and advance apprenticeship programs, PAYA researched and created a definition for and five defining principles of youth apprenticeship. The principles provide guidance to youth apprenticeship’s many stakeholders — participating employers, secondary and postsecondary institutions and youth apprentices themselves — and set a high bar for an emerging field.¹⁷

PAYA’s Defining Principles for High-Quality Youth Apprenticeship

- *Career-oriented*: Learning is structured based on knowledge, skills and competencies that lead to careers with family-supporting wages.
- *Equitable*: Learning is accessible to every student, with targeted support for those adversely affected by long-standing inequities in our education system and labor market.
- *Portable*: Learning leads to postsecondary credentials and transferable college credit that expand options for students.
- *Adaptable*: Learning is designed collaboratively to be recognized and valued across an industry or sector.
- *Accountable*: Student, employer and program outcomes are monitored using transparent metrics to support improvement.

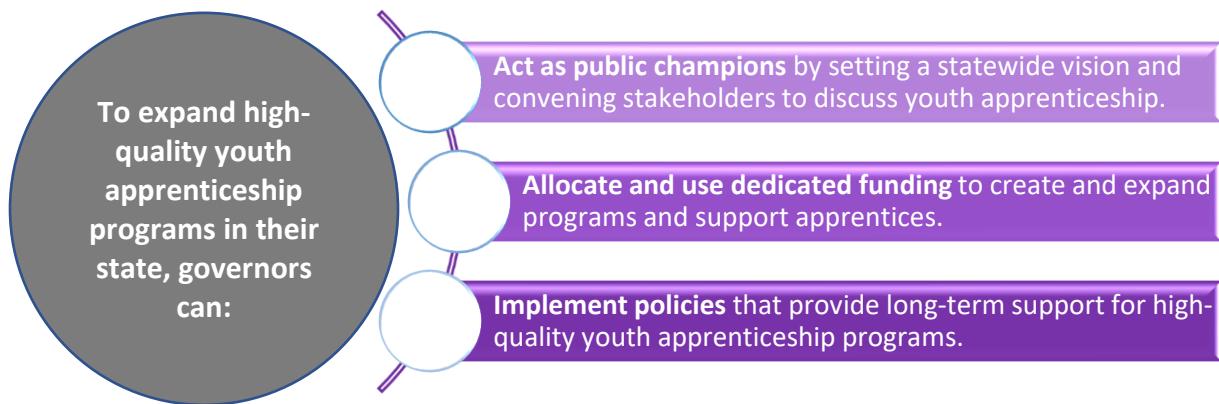


Created by New America, PAYA works to understand the ways youth apprenticeship programs can be reconsidered and developed to meet the needs of learners and employers, and then builds responding solutions. NGA is one PAYA National Partner, along with Advance CTE, CareerWise Colorado, Charleston Regional Youth Apprenticeships at Trident Technical College, Education Strategy Group, JFF, The National Alliance for Partnerships in Equity and the National Fund for Workforce Solutions. Over the next few years, PAYA will support the work that cities and states are doing to expand access to high-quality youth apprenticeship opportunities. PAYA is grateful for the support of the Annie E. Casey Foundation, the Ballmer Group, Bloomberg Philanthropies, the Joyce Foundation, JPMorgan Chase & Co. and the Siemens Foundation.

The Opportunity for Governors

Youth apprenticeship programs are gaining in popularity with governors because they improve outcomes for young people who participate in the programs while engaging businesses as investors and partners in preparing the state's workforce.¹⁸ Because the definition, scope and support system for youth apprenticeship are often determined at the state level, governors are well positioned to work with state workforce, education and economic development leaders to guide the creation and expansion of youth apprenticeship. Figure 3 provides examples of ways in which governors play a key role in expanding high-quality youth apprenticeship programs in their state.

Figure 3: Ways in Which Governors Play a Key Role in Youth Apprenticeship Programs



To advance youth apprenticeship, governors can **act as public champions**, setting a statewide vision for youth apprenticeship as a core workforce and economic development strategy. Governors can also convene stakeholders, especially business, to strategize on the best ways to achieve the governor's vision, launch cooperative initiatives and maintain program momentum.

In this way, governors can communicate their vision for youth apprenticeship and raise public awareness of the benefits of such programs, particularly for occupations in which apprenticeship has not been common. Sharing the positive results of apprenticeship for young people and the benefits for employers can gradually help increase the number of young people who consider this pathway and the number of employers that host youth apprentices.

Governor in Action: Acting as Public Champion

In 2018, **Washington** Governor Jay Inslee set a public goal of connecting 100,000 Washington youth by 2027 with career-connected learning opportunities that prepare them for in-demand, high-wage jobs, including youth apprenticeships. To accelerate this process and ensure buy-in from all stakeholders, Gov. Inslee convened a public-private task force tasked with recommending investment goals and priorities. This task force works with his office and the state Legislature to create policies to bring career-connected learning opportunities to scale. (Source: Washington Workforce Training & Education Coordinating Board. (n.d.). Washington Career Bridge. Retrieved from <https://www.wtb.wa.gov/career-resources/career-bridge>)

When governors have prioritized youth apprenticeship in their state, they can increase participation in existing programs and increase the number of available programs by **allocating and using funding** for apprenticeship programs. This funding can support apprenticeship intermediaries, provide seed funds for new programs or facilitate hiring staff to support the growth of youth apprenticeship within relevant agencies. The result is a signal to public and private stakeholders and partners that youth apprenticeship is a priority for the governor.

Governor in Action: Allocating and Using Dedicated Funding

With support from Wisconsin Governor Tony Evers, the Wisconsin Department of Workforce Development conducts an annual Youth Apprenticeship Local Grant program to award local consortia with up to \$900 per youth apprentice served, contingent on the availability of state funds. This localized effort offers incentives to public school districts and other youth apprenticeship stakeholders to work together to provide quality programs to Wisconsin youth. (Source: Frostman, C. (2019, February 12. Wisconsin Department of Workforce Development secretary's cover letter. Retrieved from <https://dwd.wisconsin.gov/youthapprenticeship/pdf/secretary-cover-letter-19-20.pdf>)

Finally, governors can **implement policy to support youth apprenticeship programs** that embed youth apprenticeship in education and workforce systems. Governors can work with stakeholders and partners to identify the state's barriers to advancing youth apprenticeship and establish policies to support effective long-term strategies to overcome those barriers. For example, governors can sign bills or

executive orders that support the awareness and expansion of youth apprenticeship as a workforce training strategy. As of April 2017, 14 states had enacted policies that support youth apprenticeship or pre-apprenticeship programs.¹⁹

Governor in Action: Implementing Policy to Support Youth Apprenticeship Programs

In 2018, **Iowa** Governor Kim Reynolds called on the state Legislature to pass the Future Ready Act during her Condition of the State address. The act is designed to achieve the governor's goal of 70% of Iowans having education or training beyond high school by 2025. The bill passed with unanimous, bipartisan support in 2018 and was fully funded at \$20 million in 2019. It established the creation of work-based learning opportunities for youth aimed at low-income students and the creation of a virtual work-based learning clearinghouse that went live on July 1, 2019. As a result of Gov. Reynolds' Future Ready Act, Iowa high schools and businesses have collaborated to expand youth apprenticeship opportunities, and 15 high schools now offer youth apprenticeships in a variety of high-demand occupations. (Source: Iowa.gov. (n.d.). Future Ready Iowa. Retrieved from www.futurereadviowa.gov)

States can advance youth apprenticeship programs in many ways, but this paper focuses on the role of governors in expanding such programs in their state. Governors play a leadership role in publicly championing initiatives, allocating and using funding and implementing policy to make meaningful and long-lasting change. Colorado, Kentucky, Maryland and North Carolina are examples of states in which there was strong governor leadership and support that capitalized on these three roles and contributed to significant expansion of youth apprenticeship opportunities. Because of this support, which often spans multiple administrations, these states have a growing number of businesses and young people taking advantage of this workforce strategy.

State Case Studies

The following four case studies explore in more depth the role gubernatorial leadership has played in advancing youth apprenticeship by setting a statewide vision, acting as public champions, using public funding and implementing supportive policies.

Colorado

“Part of [the] challenge is that the labor pool is so tight, businesses are finding it hard to find the talent that they need. So, by necessity, we are reaching out to markets we hadn’t focused on before.”

—Former Colorado Governor John Hickenlooper

(Source: Western Governors Association. (2017, September 18). Colorado Gov. Hickenlooper: Workforce development success requires innovation. Retrieved from <http://westgov.org/news/colorado-governor-hickenlooper-workforce-success-requires-innovation>)

In 2015, Colorado faced low unemployment rates, but businesses needed to fill open jobs. In response, then-Gov. Hickenlooper established the Business Experiential-Learning (BEL) Commission. The BEL Commission brings business and state leaders together to create an apprenticeship and work-based learning system to better prepare Colorado’s workforce. Co-chair of the BEL Commission and business leader Noel Ginsburg asked Gov. Hickenlooper to lead a delegation to Switzerland to learn about the country’s vocational education and training (VET) system — specifically, its youth apprenticeship model.²⁰ As a result, in January 2016, the members of the BEL Commission and representatives from Colorado’s education system, state agencies, business executives and philanthropic leaders traveled to Switzerland for a three-day trip to observe and learn about the Swiss VET system. What they learned would then inform the creation of a modern youth apprenticeship model in Colorado.²¹

The governor’s establishment of the BEL Commission, its study of best practices around the world and the trip to Switzerland inspired and laid the groundwork for the launch of the CareerWise Colorado Modern Youth Apprenticeship (CareerWise), a nonprofit organization (NPO) that connects public and private stakeholders to influence the skills and knowledge training available to Coloradans so that they can fill high-growth jobs. CareerWise launched its first pilot in 2017 with a cohort of 119 youth apprentices in four pathways (information technology [IT], business operations, financial services and advanced manufacturing) in four school districts.²² As of 2019, CareerWise has enrolled 418 youth apprentices, added health care and education pathways and expanded to an additional nine school districts. CareerWise aspires to have 10,000 youth apprentices enrolled by 2027.²³

Gov. Hickenlooper also signed legislation that created the Industry Infrastructure Grant Program, which encourages partnerships between the Colorado Workforce Development Council and like-minded NPOs to help businesses implement workforce training programs.²⁴ CareerWise received a grant and used it to create a training plan for the first 12 weeks of an apprentice’s experience, develop tools to improve teaching approaches and provide resources for employers focused on skills-based screening and hiring. In

addition to supporting the launch and growth of CareerWise, Gov. Hickenlooper signed into law the Career Development Incentive Program, which established an incentive for school districts and charter schools to earn up to \$1,000 for each high school student who completes a qualified industry credential program, internship, residency, construction pre-apprenticeship or apprenticeship program, or qualified advanced placement course.²⁵

Gov. Hickenlooper promoted the model in nearly every speech and called employers directly to inform them of the value of hiring youth apprentices. He also directed his Cabinet to use youth apprenticeship as a talent pipeline strategy, hiring youth apprentices at the Colorado Workforce Development Council, Colorado Office of Information Technology and Colorado Department of Higher Education.

Gov. Hickenlooper's successor, Gov. Jared Polis, continues to promote youth apprenticeship by extending the BEL Commission and supporting proposed legislation to fund education apprenticeships. In addition, he has ensured that his Cabinet understands and believes in youth apprenticeship as a key strategy for Colorado. He also encourages state agencies to increase their youth apprenticeship hires as talent needs are identified.

Kentucky

“I am committed to expanding our community and technical education programs, as well as creating apprenticeship opportunities in our local communities, especially in eastern and western Kentucky. Education in Kentucky should not be one size fits all, and we must remove the obstacles and find the opportunities that will help our people succeed.”

—Kentucky Governor Andy Beshear (Source: Deputy Secretary of Kentucky Education and Workforce Development Cabinet, personal communication, January 8, 2020).

Gov. Beshear firmly believes apprenticeship training, specifically youth apprenticeship, supports an educated and highly trained workforce. The Beshear administration is committed to allocating energy and resources towards strengthening apprenticeship in Kentucky. This commitment includes a continued emphasis on youth apprenticeship programs and CTE that have spanned several administrations in the Commonwealth. Since 2013, Kentucky has strengthened the partnership between education and industry by connecting youth apprenticeship to high-quality CTE programs. The state's efforts to scale high-quality youth apprenticeship have benefitted from strong bipartisan support across several gubernatorial administrations.

The Kentucky Department of Education's (KDE) Office of Career and Technical Education partners with the Kentucky Education and Workforce Development Cabinet to oversee the Tech Ready Apprentices for Careers in Kentucky (TRACK) program. TRACK is a nonpartisan effort that has succeeded under both Democratic and Republican administrations. Launched with six students in 2013, TRACK is now a statewide youth apprenticeship program for high school students that uses the state's CTE infrastructure to offer students paid work experience and the ability to earn industry-recognized credentials. As of

December 2018, 250 students had completed or enrolled in the program. TRACK started in manufacturing and skilled trades; it has since expanded into new sectors, such as finance, health care and IT.^{26,27} Each student earns three CTE coursework credits in addition to paid work experience. Upon completing a youth apprenticeship, students can enter a registered apprenticeship, find employment or enroll in postsecondary education.²⁸

Students benefit from this program because it connects their academic coursework in ways that increase its relevance and their engagement. Students get paid while gaining marketable work experience, and they can earn an industry-recognized credential at little or no cost to them. To support this program, the Kentucky Dual Credit Scholarship Program allocated \$15 million in the 2016-2017 school year to all school districts for high school juniors and seniors to earn dual credit at no cost to them. Dual credit gives high school students the opportunity to receive high school credit and postsecondary credit at the same time.²⁹ This investment resulted in a significant increase in dual enrollments, with 9,000 students enrolled in 2016 and 32,000 students enrolled in 2018.³⁰

In 2016, Kentucky General Assembly approved the Kentucky Work Ready Skills Initiative with support from the former governor. The initiative invested \$100 million in statewide bonds to improve the CTE infrastructure and grow a trained workforce that meets the needs of local employers.³¹ The bonds funded 40 local projects over two competitive rounds of funding released in 2016 and 2017 to enhance CTE facilities and upgrade equipment.³² Projects that supported youth apprenticeship were given priority in the review process.³³ The initiative is administered by the Kentucky Education and Workforce Development Cabinet in coordination with the Cabinet for Economic Development. In addition, the state leveraged more than \$140 million private sector funding annually to support the initiative.³⁴ The programs address industry needs in local areas and will create more than 30,000 technical training opportunities across the state.³⁵

In 2017, state government leaders, federal policymakers and business leaders joined NGA Center on a trip to Germany and Switzerland to learn more about those countries' apprenticeship models. On the trip, Kentucky officials identified ways to incorporate Swiss and German best practices into their own models and campaigns.³⁶

Maryland

“Youth apprenticeship bridges the gap between K-12 and post-secondary education and connects high school graduates to the workforce. We are committed to expanding opportunities and building lasting career pathways for our students through the successful Apprenticeship Maryland program.”

—Maryland Gov. Larry Hogan (Source: Maryland Department of Labor. (2019, May 6). *Allegany and Carroll counties join youth apprenticeship program* [Press release]. Retrieved from <https://www.labor.maryland.gov/whatsnews/apprallecarr.shtml>)

Gov. Hogan views youth apprenticeship as an important part of his statewide economic development strategy. He promotes Maryland’s youth apprenticeship model as a pipeline for students to access good jobs and a way to meet business needs. Gov. Hogan also promotes youth apprenticeship as an entry point for high school students to get on a path to earning an in-demand postsecondary credential.³⁷

In 2014, Maryland House Bill (H.B.) 1207 established a Youth Apprenticeship Advisory Committee.³⁸ The committee was charged with evaluating the effectiveness of the high school youth apprenticeship model and developing relevant recommendations for the State of Maryland. The committee consists of representatives from the Maryland State Department of Education (MSDE), the Maryland Department of Commerce, the Maryland Department of Labor, the Maryland Chamber of Commerce, registered apprenticeship sponsors, industry at large and community colleges. In 2015, the committee released a blueprint for creating a youth apprenticeship system in Maryland.³⁹

Based on the blueprint, Gov. Hogan signed Maryland H.B. 942 in 2016, establishing the Apprenticeship Maryland Program, which initially started as a pilot.⁴⁰ Apprenticeship Maryland is administered by the state Department of Labor and MSDE and was created to prepare students to enter employment in high-skill, high-growth sectors, including manufacturing and science, technology, engineering and mathematics fields. Targeted sectors include health care, biotechnology, IT, construction and design, and banking and financing.⁴¹ The program is designed for students 16 years of age and older in their junior or senior year of high school. Participants complete at least 450 hours of hands-on training with an employer and at least a year of related instruction.⁴² Apprentices have a chance to “learn and earn” with local businesses while simultaneously receiving high school credit and earning an industry-recognized credential.⁴³

To extend access to youth apprenticeship to more high school students, Gov. Hogan’s administration launched Apprenticeship Maryland as a new CTE program of study in 2018. This program provides all local public school systems with a framework to implement Apprenticeship Maryland in their local schools.⁴⁴ Currently, Apprenticeship Maryland has the goal of adding four to eight counties per year. Since the statewide launch, 13 local public school systems have adopted the program. In 2016, 11 students had enrolled, and 14 businesses were involved. Today, there are 64 participating students and 140

participating employers. Participating employers represent a variety of industries, including skilled trades, health care, automotive, education, culinary, journalism, transportation and logistics.⁴⁵

North Carolina

“Businesses in North Carolina need a skilled workforce to thrive, and a better educated and trained workforce also attracts new companies and jobs to the state.”

—North Carolina Governor Roy Cooper (Source: Investments for a Determined North Carolina, Governor Coopers Recommended Budget for 2019-21. Retrieved from https://files.nc.gov/ncosbm/documents/files/BudgetBook_web_2019_rev.pdf)

Gov. Cooper’s priorities for improving public education for North Carolinians and growing the state’s economy include using and expanding existing work-based learning opportunities.⁴⁶ He recently established an attainment goal of 2 million North Carolinians holding postsecondary credentials by 2030, including those gained through youth apprenticeship and other high-quality work-based learning programs.⁴⁷

These priorities are evident in the governor’s 2019-2021 proposed budget, which provides \$10 million for a grant program that helps employers provide work-based learning opportunities and develop a skilled workforce. Funds may be used for youth apprenticeship programs.⁴⁸

To support further development of work-based learning programs like youth apprenticeship, in 2018, Gov. Cooper’s office launched the Navigator platform in partnership with Fidelity Investments and the North Carolina Business Committee for Education.⁴⁹ The Navigator is a free online tool through which students, teachers and parents can search for work-based learning opportunities, including youth apprenticeships, posted directly by employers. This platform also streamlines interactions among businesses, education and workforce development communities to facilitate and inform the creation of new work-based learning programs and improve the quality of existing programs.⁵⁰

North Carolina has been developing and expanding high-quality, employer-driven work-based learning for several years. In 1995, Swiss and German business leaders created Apprenticeship 2000 in the Charlotte area.⁵¹ Apprenticeship 2000 provides technical career training to high school students that leads to employment after graduation and responds to employers’ hiring needs.⁵² The Apprenticeship 2000 youth apprenticeship model is industry driven and registered by the state. The original business leaders running the program traveled across the state advertising their model to create new regional consortia and build a statewide pool of highly skilled youth. The regional consortia are locally driven and created based on employer need and willingness to implement a program. Now, 20 regional youth apprenticeship consortia exist across the state.⁵³ The consortia sometimes receive state

funds. For example, in 2018, Gov. Cooper announced \$3.2 million to the Eastern Triad Workforce Initiative to support the launch and implementation of pilot apprenticeship programs specific to that region.⁵⁴

ApprenticeshipNC, administered by the North Carolina Community College system and housed within the Economic Development Division, monitors the statewide registered apprenticeship program. Through the Customized Training Program, the state's 58 community colleges are already engaging with businesses to create training programs for those companies that are creating jobs and investing in new technologies within the state. This positioning gives North Carolina an opportunity to further use and customize apprenticeship as a strategy to meet businesses' workforce needs. ApprenticeshipNC convenes employers across the state, enriching existing programs and keeping programs in compliance with U.S. DOL apprenticeship registration requirements. In 2018, the program served 449 youth apprentices across 65 high schools and 18 community colleges.

Gubernatorial Leadership in Scaling Youth Apprenticeship

	Act as Public Champion	Allocate and Use Dedicated Funding	Implement Policy in Support of Youth Apprenticeship
Colorado	<ul style="list-style-type: none"> Created the BEL Commission. Led a trip to Switzerland to learn about apprenticeship. Established CareerWise Colorado. Directly asked employers to participate. 	<ul style="list-style-type: none"> Signed legislation to establish the Industry Infrastructure Grant Program. Signed legislation to establish the Career Development Incentive Program. Signed legislation to allow schools to retain full per-pupil funding even if apprentices are in the workplace during class time.⁵⁵ 	
Kentucky	<ul style="list-style-type: none"> Led campaign committed to expand apprenticeship. Supported the partnership that created TRACK. Led a state delegation to Germany and Switzerland to learn about their apprenticeship efforts. 	<ul style="list-style-type: none"> Launched the Kentucky Dual Credit Scholarship Program. Launched the Kentucky Work Ready Skills Initiative. 	<ul style="list-style-type: none"> Adopted new graduation requirements for all students who enter high school for the 2019-2020 school year. All students will be required to meet one of eight qualifiers, one of which is to complete two years of a pre-apprenticeship or apprenticeship.⁵⁶

	Act as Public Champion	Allocate and Use Dedicated Funding	Implement Policy in Support of Youth Apprenticeship
Maryland	<ul style="list-style-type: none"> Incorporated apprenticeship into the statewide economic development strategy. 	<ul style="list-style-type: none"> Uses workforce funds under the Workforce Innovation and Opportunity Act to seed innovation and fund staff. 	<ul style="list-style-type: none"> Established a Youth Apprenticeship Advisory Committee. Created Apprenticeship Maryland. Developed a framework to implement Apprenticeship Maryland in all local public school systems.
North Carolina	<ul style="list-style-type: none"> Established an attainment goal that includes apprenticeship. Launched Navigator, an online platform. 	<ul style="list-style-type: none"> Proposed funding in the 2019-2021 budget for an apprenticeship grant program. Provided state funds to support local apprenticeship consortia. 	<ul style="list-style-type: none"> Oversaw the smooth transition of ApprenticeshipNC to the state's community college system.

Conclusion

Governors have a unique opportunity to prepare a highly skilled workforce and address employers' needs through the development and expansion of high-quality youth apprenticeship. Youth apprenticeship is a work-based learning strategy that aligns education and training systems with the needs of employers. Through youth apprenticeship programs, high school youth benefit by earning paid work experience, academic credit and an industry-recognized credential that prepares them for in-demand jobs at little to no cost to them. Preparing students for the workforce and meeting employers' needs reduce the risk of youth unemployment and underemployment; they also reduce the drain on limited state and federal resources to serve disconnected youth populations. Governors see the urgency in preparing students with the skills they need for in-demand jobs and addressing local businesses' talent needs. By acting as public champions, setting a statewide vision and convening stakeholders in support of youth apprenticeship; allocating and using dedicated funding; and implementing policies that provide long-term support for high-quality youth apprenticeship programs, governors will encourage the creation and expansion of these programs across the country.

¹ Carnevale, A. P., Strohl, J., Ridley, N., & Gulish, A. (2018). *Three educational pathways to good jobs: High school, middle skills, and bachelor's degree*. Retrieved from <https://1gyhoq479ufd3yna29x7ubjn-wpengine.netdna-ssl.com/wp-content/uploads/3ways-FR.pdf>

² Strada Education Network & Lumina Foundation. (2019, May 13). New Strada-Lumina report finds non-degree credentials have high value for U.S. adults. Retrieved from <https://www.stradaeducation.org/press-release/new-strada-lumina-report-finds-non-degree-credentials-have-high-value-for-u-s-adults>

³ Gould, E., Wolfe, J., & Mokhiber, Z. (2019, June 6). Class of 2019: High school edition. Retrieved from <https://www.epi.org/publication/class-of-2019-high-school-edition>

⁴ Opportunity Nation. (n.d.). Youth disconnection. Retrieved from <https://opportunitynation.org/disconnected-youth>

⁵ U.S. Bureau of Labor Statistics. (2019, July 9). Databases, tables & calculators by subject: Labor force statistics from the current population survey. Retrieved from <https://data.bls.gov/timeseries/LNS14000000>

⁶ U.S. Bureau of Labor Statistics. (2019, December 17). *Job openings and labor turnover summary* [Press release]. Retrieved from <https://www.bls.gov/news.release/jolts.nr0.htm>

⁷ Linked Learning. (2012, November). *Work-based learning in linked learning: Definitions, outcomes, and quality criteria*. Retrieved from http://connectedntl.wpengine.com/wp-content/uploads/2018/11/wbl-definitions-outcomes-criteria_pg_120512_v2.pdf. P.2

⁸ Hauge, K. (2018, January). *States continue advancing strategies to scale work-based learning*. Retrieved from https://www.nga.org/wp-content/uploads/2019/09/0118_States-Continue-Advancing-Strategies-to-Scale-Work-Based-Learning.pdf

⁹ Linked Learning. (n.d.). About the Linked Learning approach. Retrieved from <https://www.linkedlearning.org/about/work-based-learning>

¹⁰ Whitehouse, E., & Shafer, M. (2017, March 27). Emerging state policies on youth apprenticeships. Retrieved from <https://knowledgecenter.csg.org/kc/content/emerging-state-policies-youth-apprenticeships>

¹¹ Parton, B. (2017, December). Youth apprenticeship in America today: Connecting high school students to apprenticeship. Retrieved from <https://na-production.s3.amazonaws.com/documents/Youth-Apprenticeship-Today.pdf>

¹² Based on data provided by New America on June 20, 2019.

¹³ Ross, M., & Hauge, K. (2018, April 23). States equip employers to drive apprenticeship. Retrieved from <https://www.brookings.edu/blog/the-avenue/2018/04/23/states-equip-employers-to-drive-apprenticeship>

¹⁴ U.S. Department of Labor, Employment & Training Administration. (2017, January 17). Training and employment notice. Retrieved from https://wdr.doleta.gov/directives/attach/TEN/TEN_31-16.pdf

¹⁵ U.S. Department of Labor, Employment & Training Administration. (2017, January 17). Training and employment notice. Retrieved from https://wdr.doleta.gov/directives/attach/TEN/TEN_31-16.pdf

¹⁶ Advance CTE. (2019). *The role of data and accountability in growing youth apprenticeship*. Retrieved from https://cte.careertech.org/sites/default/files/files/resources/AdvanceCTE_YouthApprenticeship_Data_2019.pdf

¹⁷ Parton, B. (2018, October 31). What is youth apprenticeship? Definition and guiding principles for high-quality youth apprenticeships [Web log post]. Retrieved from <https://www.newamerica.org/education-policy/edcentral/youth-apprenticeship-definition-and-guiding-principles>

¹⁸ Parton, B. (2017, December). Youth apprenticeship in America today: Connecting high school students to apprenticeship. Retrieved from <https://na-production.s3.amazonaws.com/documents/Youth-Apprenticeship-Today.pdf>

¹⁹ Wilson, B., & Mehta, S. (2017, April). *Skills in the states. Work-based learning policy 50-state scan*. Retrieved from <https://m.nationalskillscoalition.org/resources/publications/file/WBL-Learning-Policy-50-State-Scan.pdf>

²⁰ Hoffman, N., & Schwartz, R. (2015, March). *Gold standard: The Swiss Vocational Education and Training System. International comparative study of vocational education systems*. Retrieved from <http://ncee.org/wp-content/uploads/2018/09/SWISSVETSep2018web.pdf>

²¹ Colorado.gov. (n.d.). Colorado's Swiss apprenticeship model: A letter from Governor Hickenlooper. Retrieved from https://www.colorado.gov/pacific/sites/default/files/CO_Swiss_Apprenticeship_Model.pdf

²² CareerWise Colorado. (n.d.). How it works. Retrieved from <https://www.careerwisecolorado.org/the-program/why-it-works>

²³ Based on data provided by CareerWise Colorado on December 28, 2018.

²⁴ Colorado General Assembly. (n.d.). HB16-1288: Industry Infrastructure Grant Program. Retrieved from <https://leg.colorado.gov/bills/hb16-1288>

²⁵ Colorado Department of Education. (2018, October). *Career Development Incentive Program fact sheet*. Retrieved from <https://www.cde.state.co.us/postsecondary/careersuccesspilotprogramfactsheet2016-17>

²⁶ Based on data provided by the Kentucky Department of Education on January 11, 2019.

²⁷ Kentucky Department of Education. (n.d.). *Tech Ready Apprentices for Careers in Kentucky*. Retrieved from <https://education.ky.gov/CTE/cter/Documents/TRACKBrochure.pdf>

²⁸ Advance CTE. (n.d.). Learning that Works Resource Center. Kentucky: Tech Ready Apprentices for Careers in Kentucky (TRACK). Retrieved from <https://careertech.org/resource/kentucky-track>

²⁹ Kentucky Higher Education Assistance Authority. (n.d.). Dual Credit Scholarship Program. Retrieved from https://www.kheaa.com/website/kheaa/dual_credit?main=1

³⁰ Based on data provided by the Kentucky Department of Education on June 13, 2019.

³¹ Kentucky Education and Workforce Development Cabinet. (n.d.). Kentucky Work Ready Skills Initiative. Retrieved from <https://educationcabinet.ky.gov/Initiatives/Work-Ready-Skills-Initiative/Pages/Work-Ready-Skills-Initiative.aspx>

³² Kentucky Education and Workforce Development Cabinet. (n.d.). Kentucky Work Ready Skills Initiative. Retrieved from <https://educationcabinet.ky.gov/Initiatives/Work-Ready-Skills-Initiative/Pages/Work-Ready-Skills-Initiative.aspx>

³³ Based on data provided by the Kentucky Education and Workforce Development Cabinet on June 13, 2019.

³⁴ Based on data provided by the Kentucky Education and Workforce Development Cabinet on June 13, 2019.

³⁵ The Lane Report. (2018, March 29). Kentucky Work Ready Skills Initiative expanding technical educational training opportunities. Retrieved from <https://www.lanereport.com/88726/2018/03/kentucky-work-ready-skills-initiative-expanding-technical-educational-training-opportunities>

³⁶ Kentucky Press News Service. (2017 March 28). Bevin, Kentucky delegation participate in European apprenticeship study visit. Retrieved from <https://insiderlouisville.com/government/bevin-kentucky-delegation-participate-in-european-apprenticeship-study-visit>

³⁷ Based on data provided by the Maryland Office of Workforce Development on January 4, 2019.

³⁸ Division of Labor and Industry - Youth Apprenticeship Advisory Committee, 2014 Md. H.B. 1207 § 646 (2015). Retrieved from <https://www.legiscan.com/MD/text/HB1207/2014>

³⁹ State of Maryland Department of Labor, Licensing and Regulation. (2016). *Youth Apprenticeship Advisory Committee annual report 2016*. Retrieved from <https://www.dllr.state.md.us/employment/appr/youthapprnrep2016.pdf>

⁴⁰ State of Maryland Department of Labor, Licensing and Regulation. (2015). *Youth Apprenticeship Advisory Committee annual report 2015*. Retrieved from <https://www.dllr.state.md.us/employment/appr/youthapprrep.pdf>

⁴¹ Apprenticeship Maryland. (n.d.). Apprenticeship Maryland. Retrieved from <http://marylandpublicschools.org/programs/Pages/CTE/ApprenticeshipMD.aspx>

⁴² Maryland State Department of Education. (n.d.). Apprenticeship Maryland. Retrieved from <http://marylandpublicschools.org/programs/Pages/CTE/ApprenticeshipMD.aspx>

⁴³ Apprenticeship Maryland. (n.d.). *Our vision*. Retrieved from <https://www.dllr.state.md.us/employment/appr/youthapprbrochure.pdf>

⁴⁴ Apprenticeship Maryland. (2018). *Youth Apprenticeship Advisory Committee annual report 2018*. Retrieved from <https://www.dllr.state.md.us/employment/appr/youthapprnrep2018.pdf>

⁴⁵ Based on data provided by the Maryland Office of Workforce Development on June 19, 2019.

⁴⁶ Based on data provided by North Carolina Gov. Roy Cooper's Office on June 17, 2019.

⁴⁷ Kinlaw, R. (2019, February 22). myFutureNC releases attainment goal for North Carolina. Retrieved from <https://nccppr.org/myfuturenc-releases-attainment-goal-for-north-carolina>

⁴⁸ North Carolina Office of State Budget and Management, Office of the Governor. (2019, March). *Investments for a determined North Carolina: Governor Cooper's recommended budget, 2019-21*. Retrieved from https://files.nc.gov/ncosbm/documents/files/BudgetBook_web_2019_rev.pdf

⁴⁹ Office of NC Governor Roy Cooper. (2018, December 5). *Governor Cooper unveils “Navigator,” North Carolina’s online work-based learning tool to link classrooms and careers* [Press release]. Retrieved from <https://governor.nc.gov/news/governor-cooper-unveils-“navigator”-north-carolina’s-online-work-based-learning-tool-link>

⁵⁰ Office of NC Governor Roy Cooper. (2018, December 5). *Governor Cooper unveils “Navigator,” North Carolina’s online work-based learning tool to link classrooms and careers* [Press release]. Retrieved from <https://governor.nc.gov/news/governor-cooper-unveils-“navigator”-north-carolina’s-online-work-based-learning-tool-link>

⁵¹ Apprenticeship 2000. (n.d.). About our program. Retrieved from <http://apprenticeship2000.com/zwp/about>

⁵² Apprenticeship 2000. (n.d.). About our program. Retrieved from <http://apprenticeship2000.com/zwp/about>

⁵³ Based on data provided from ApprenticeshipNC on July 17, 2019.

⁵⁴ Office of NC Governor Roy Cooper. (2018, August 2). *Governor Cooper celebrates new regional workforce development initiative* [Press release]. Retrieved from <https://governor.nc.gov/news/governor-cooper-celebrates-new-regional-workforce-development-initiative>

⁵⁵ Colorado General Assembly. (n.d.). SB19-216: High school innovative learning pilot. Retrieved from <https://leg.colorado.gov/bills/sb19-216>

⁵⁶ Kentucky Department of Education. (n.d.). *Kentucky Department of Education: New minimum graduation requirements*. Retrieved from https://education.ky.gov/curriculum/hsgradreq/Documents/New_Graduation_Requirements.pdf